

Title (en)  
METHOD AND CONTROL DEVICE FOR DETERMINING RELIABILITY REGARDING MISFIRE DETERMINATION OF CYLINDERS OF AN INTERNAL COMBUSTION ENGINE

Title (de)  
VERFAHREN UND STEUERVORRICHTUNG ZUR BESTIMMUNG DER ZUVERLÄSSIGKEIT BEZÜGLICH DER FEHLZÜNDUNGSBESTIMMUNG VON ZYLINDERN EINES VERBRENNUNGSMOTORS

Title (fr)  
PROCÉDÉ ET DISPOSITIF DE COMMANDE POUR DÉTERMINER LA FIABILITÉ D'UNE DÉTERMINATION DE RATÉ D'ALLUMAGE DE CYLINDRES D'UN MOTEUR À COMBUSTION INTERNE

Publication  
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Application  
**EP 19826306 A 20190614**

Priority  
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• SE 2019050562 W 20190614

Abstract (en)  
[origin: WO2020005134A1] The present invention relates to a method for determining reliability regarding misfire determination of cylinders of an internal combustion engine. The method comprises the step of detecting the pressure in the exhaust manifold arrangement of the internal combustion engine for a set of operation parameters comprising a certain range of crank angles for a certain engine load and certain engine speed so as to, for the actual cylinder setup of the engine, create a pressure sample value patterns for combustion and misfire conditions. A template course is created for the thus created pressure sample value patterns, said template course comprising a set of sample points. The pressure for the created template courses is normalized at a desired crank angle. The normalized template courses are stored. Then difference values are determined based upon difference between sample points and corresponding detected and normalized pressure values within in a desired range of crank angles. The thus determined difference values are summarized so as to determine whether a predetermined share of the summarized difference values lies above or below a predetermined threshold value so as to determine reliability regarding misfire determination. The present invention also relates to a control device for determining reliability regarding misfire determination of cylinders of an internal combustion engine. The present invention also relates to a vehicle. The present invention also relates to a computer program and a computer readable medium.

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CPC (source: EP SE US)  
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Citation (search report)  
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• [A] JP 2001012293 A 20010116 - YAMAHA MOTOR CO LTD  
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• See also references of WO 2020005134A1

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